DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014564 Address: 333 Burma Road **Date Inspected:** 03-Jun-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 9AW/9BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW9B-004. The welder is identified as #066326 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 9AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG049A-011. The welder is identified as #066361 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

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Segment 9BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG049A-011. The welder is identified as #066361 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 9AE/9BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE9B-004. The welder is identified as #054467 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1.

Segment 8BE/8CE

This QA Inspector observed grit blasting in progress at the transverse CJP splice, interior of the segment.

Segment 8CE/9AE

This QA Inspector observed ZPMC personnel performing Ultrasonic Testing on the Edge Plate to Deck Plate CJP hold back weld, at cross beam side field splice.

Segment 7BE

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing on the Bottom Panel I-ribs at the FL3 to Cross beam location panel point 50-52.

This QA Inspector observed grit blasting in progress on the interior of the segment.

BK1-034

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing on the Bike Path Cantilever Side Panels at location of removed lifting lugs.

ZPMC Quality Control (QC) Inspector is identified as Wang Zhu. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Lift 8 East

This QA Inspector observed Final Bolt Tension verification on A325 High Strength Bolts for the Corner Assembly Angle Brace components at panel points 61 to 71. The following bolts were used:

M22x55 DHGM220001 M22x85 DHGM220007

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M24x60 DHGM240014

M24x65 DHGM240013

M24x80 DHGM240011

M22x85 DHGM220104

M22x120 DHGM220052

Segment 7AE, 7BE

This QA Inspector observed Final Bolt Tension verification on A325 High Strength Bolts for the Side Plate and Bottom Plate WT to Floor beam connection clips at panel points 48 to 52. The following bolts were used:

M16x45 DHGM160001

M16x50 DHGM160004

M16x65 DHGM160006

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez, Dan	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer